Benzene

CAS 71-43-2

Current North Carolina AAL = 1.2×10^{-4} mg/m^3 (annual, carcinogen)

AAL Documentation

Inhalation Unit Risk (IUR) [1] = 8.1×10^{-6} per µg/m^3

Known human carcinogen by EPA, Group A
AAL based on 10^{-6} risk

Linear Calculation $\frac{1}{8.1 \times 10^{-6} \text{ per } \mu g/m^3} = \frac{x}{1 \times 10^{-6}}$

$$x = \frac{1 \times 10^{-6}}{8.1 \times 10^{-6}}$$

$$x = 1.2 \times 10^{-1} \ \mu g/m^3$$

AAL for benzene[2] = 1.2×10^{-4} mg/m^3

This information has been reconstructed using the decision matrix established by the North Carolina Academy of Sciences Air Toxics Panel, September, 1986.

Final version- June 2013 (CMP)

[1] Quantitative Cancer Unit Risk Estimates due to Inhalation of Benzene, EPA Carcinogen Assessment Group Internal Report, 1985 (EPA/600/X-85-022). IUR based on occupational study data.
[2] 1 µg/m^3 = 10^{-3} mg/m^3